

WHAT IS CLAIMED IS:

1. A method for producing a ~~sheathed~~ penetrator having a steel ~~sheath~~ and a heavy-metal core, the heavy metal core having a smooth surface, the method comprising:
  - heating the steel ~~sheath~~ to a temperature between 70 and 350 °C;
  - inserting the heavy-metal core into the heated steel ~~sheath~~; and
  - allowing the steel ~~sheath~~ to cool down,wherein an inside diameter of the steel ~~sheath~~ and an outside diameter of the heavy-metal core are such that an interference fit exists between the steel ~~sheath~~ and the heavy-metal core after the steel ~~sheath~~ has cooled down.
2. The method according to claim 1, wherein the steel ~~sheath~~ is heated to a temperature of approximately 150 °C.
3. The method according to claim 1, wherein the steel ~~sheath~~ and the heavy-metal core are additionally connected by glue.
4. The method according to claim 1, wherein the steel

~~sheath~~ is produced with the aid of a powder-metallurgical method. J.O.

5. The method according to claim 1, wherein the steel ~~sheath~~ is produced through processing of a respective solid material. J.O.

6. The method according to claim 1, wherein the inside diameter of the steel ~~sheath~~ and the outside diameter of the heavy-metal core have a conical shape that has a larger diameter at a front end of the penetrator. J.O.

7. The method according to claim 2, wherein the steel ~~sheath~~ and the heavy-metal core are additionally connected by glue. J.O.

8. The method according to claim 2, wherein the steel ~~sheath~~ is produced with the aid of a powder-metallurgical method. J.O.

9. The method according to claim 2, wherein the steel ~~sheath~~ is produced through processing of a respective solid material. J.O.

10. The method according to claim 2, wherein the inside diameter of the steel ~~sheath~~ and the outside diameter of the heavy-metal core have a conical shape that has a larger diameter at a front end of the penetrator. J-0.